was too far upstream to have fringe characteristics. Flooding was due to headwater flooding from the drainage basin rather than shoreline flooding from "setup" of the Chowan River by wind. Consequently, hydrologic characteristics of fringe wetlands in Albemarle Sound remain undetermined.

Because of the distinct geomorphic setting of fringe and interior wetlands with respect to uplands in North Carolina's sounds, commonly used approaches for predicting effects of rising sea level on the coastal plain are inappropriate and misleading. One approach assumes that fringe wetlands gently rise in elevation from the shoreline to uplands, and sea level rise will result in the overland migration of these wetlands. For most of the shoreline of the Pamlico and Albemarle Sounds, this condition is absent because wetlands already occupy much of the area that was upland under conditions of lower sea level stage. In many areas fringe wetlands gently grade into interior swamp forests and pocosins with no meaningful change in elevation and no transition to uplands within distances that would be relevant to the notion of migrating wetlands. Another approach uses contour lines on topographic maps to predict future shoreline positions as sea level rises. This approach ignores the dominant role that wetlands have played in the landscape development in the coastal plain. The interaction of rising sea level and coastal wetlands is complex and varies from one geographic area to another. Alternative approaches to predicting the effects of rising sea level need to be developed for the situation as it exists in North Carolina. An important uncertainty is whether wetlands can sustain themselves when exposed to accelerated rates of rising sea level.

Clearly more information is needed on the sea-level controlled, nontidal fringe wetlands that are so prevalent in the Albemarle and Pamlico Sound regions. The present study is preliminary and has served as an initial characterization from which more indepth research efforts may be developed.